STANDARD OPERATING PROCEDURE (SOP)
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SUBJECT: Kai Tak International Airport (VHHX) Standard Operating Procedures

EFFECTIVE DATE: 07 DEC 2024

SCOPE: Outlines standard techniques for online ATC service at Kai Tak International Airport (VHHX) on VATSIM.

1. PURPOSE

1.1. This Standard Operating Procedure (SOP) sets forth the procedures for all controllers providing aerodrome air traffic control service at Kai Tak International Airport (VHHX) to improve communication, techniques, and to distinguish procedures that are specific to the online environment.

2. ROLES AND RESPONSIBILITIES

2.1. The Office of Primary Responsibility (OPR) for this SOP is the team under the supervision of the Facilities Director. This SOP shall be maintained, revised, updated or cancelled by the Facilities Director. Any suggestions for modification / amendment to this SOP should be sent to the Facilities Director for review.

3. DISTRIBUTION

3.1. This SOP is intended for controllers staffing aerodrome ATC positions at Kai Tak International Airport (VHHX) and other controllers who interface with aerodrome controllers at VHHX.

4. BACKGROUND

4.1. Over time, controllers have found that having aircraft arrive and depart via pre-approved runways provides for a more orderly traffic flow and reduces the need for communication among controllers at VHHX. Due to operational differences between this online environment on VATSIM and that in the real world, it is also necessary to defines procedures that are specific to the online environment.

4.2. There have been several scenery add-ons created to simulate flights at this legacy airport. Due to interest within the VATSIM community, Hong Kong vACC considers Kai Tak as an operating airport within the Hong Kong airspace on VATSIM and continues to provide ATC service for the airport even though Kai Tak is permanently closed in the real world.

5. REQUIREMENTS

5.1. FREQUENCIES

5.1.1. The following frequencies shall be used at all times for aerodrome control positions at Kai Tak International Airport. Frequencies other than listed may not be used. Since many historic frequencies at Kai Tak are still in use at Hong Kong International Airport (VHHH), secondary frequencies are used to avoid conflict.

POSITION	TEXT CALL SIGN	CODE	VOICE & COORDINATION CALL SIGN	FREQUENCY
Clearance Delivery	VHHX_DEL:	KDC	"Kai Tak Delivery"	121.000
Ground Movements Control	VHHX_GND	KGC	"Kai Tak Ground"	121.925
Air Movements Control	VHHX_TWR	KAC	"Kai Tak Tower"	124.650

5.1.1. When any position covering Kai Tak aerodrome is online, the controller may elect to set up voice Automatic Terminal Information Service (ATIS) using METAR information from VHHH. The following frequency shall be used:

POSITION	TEXT CALL SIGN	CODE	FREQUENCY
Kai Tak Information	VHHX_ATIS	KTIS	122.075

5.2. While communicating over voice and broadcasting ATIS, controllers shall always refer to and follow the SOP document HKVACC-SOP-011 "ATC Coordination" and other VATSIM regulations governing the broadcast of ATIS.

6. RUNWAY-IN-USE

6.1. PREFERENTIAL RUNWAY SYSTEM (DIRECTION OF OPERATIONS)

6.1.1. **Runway 13** will be nominated as the runway in use whenever the **tailwind component**, including gust values, is **10kt or less** when the runway is dry, or **5kt or less** when the runway is wet.

6.2. All IFR arrival aircraft shall by default use **IGS approach** to land on **RWY 13** and **ILS approach** to land on **RWY31**. Other IAPs and visual approach may be used with ATC approval if the pilot is unable to perform IGS or ILS approach.

6.3. As Kai Tak Int'l Airport is closed in the real world, METAR for VHHX is not available online. In lieu of VHHX METAR, controllers shall use the METAR for VHHH airport to determine runway in use. Controllers may visit the Hong Kong Civil Aviation Department (CAD) Automatic Terminal Information Service (ATIS) website (https://atis.cad.gov.hk) for the latest weather information.

6.4. See Section 7 of this SOP document for noise abatement procedures.

7. NOISE ABATEMENT PROCEDURES

7.1. As Per Hong Kong AIP AD 2.21 and AD 2.22, Noise Abatement Procedures are adopted on VATSIM for Hong Kong International Airport (VHHH). However, for the purposes of flight simulation on VATSIM, these procedures are not observed for Kai Tak Airport on VATSIM.

7.2. Kai Tak Airport is available **H24** (24 hours a day, 7 days a week) on VATSIM even though historically there were curfew hours for the airport.

8. CLEARANCE DELIVERY

8.1. AREA OF RESPONSIBILITY

8.1.1. Clearance Delivery does not have its own sector. All ground movements are handled by Ground Movements Control.

8.2. PRE-CLEARANCE INSTRUCTIONS

8.2.1. The ICAO code for Kai Tak Int'l Airport is **VHHX** to differentiate from the existing Hong Kong International Airport (VHHH).

8.2.2. Clearance Delivery shall examine each field of the flight plan submitted by the pilot and ensure that the **route and altitude** is sound and appropriate prior to issuing IFR clearance. If an incorrect route or altitude is filed, the Delivery controller shall advise the pilot and provide a correct alternative. If the pilot accepts the alternative, the Delivery controller shall amend the flight plan accordingly.

8.2.3. Charts for Aerodrome, SID and STAR are available on the Hong Kong vACC Website.

8.2.4. The Delivery controller may refer to the Hong Kong vACC Cue Card for SID route and squawk code reference.

8.2.5. As Kai Tak is a closed airport in the real world, certain waypoints and/or navaids may not be available on pilots' flight computers. Should this be the case, the Delivery controller may suggest pilots to depart via radar vectors, subject to the approval of the controller responsible for Hong Kong Departure.

8.2.6. The Delivery controller shall check for the **runway-in-use** (this is determined by Air Movements Control and announced on ATIS), **noise abatement procedures** and **runway closure**. If Air Movements Control is not online, the Delivery controller may recommend

pilots to depart from a specific runway under consideration of **Section 6.1** (-> current tailwind component, METAR and TAF). However, pilots have the final say whenever Air Movements Control is not online.

8.2.7. It is the **responsibility of the Delivery controller to issue a SID to departing IFR aircraft.** In such a situation, the route in the flight plan submitted by the pilot will begin with the initial waypoint. The Delivery controller shall prepend the cleared SID into the aircraft's flight plan after the enroute clearance has been given. The departure runway shall also be included to allow EuroScope to display the SID routing correctly. **Ensure that airfields are not included in the route.**
(for example: DOTMI1A/13 DOTMI... if cleared DOTMI1A departure)

8.2.8. IFR departing aircraft unable to follow a SID may be cleared for "radar vectors departure" subject to the approval of the terminal airspace controller (i.e. APP/DEP). If this is the case, "RDVR" and the departure runway shall be added to the flight plan to indicate that the aircraft needs radar vectors for departure.
(for example: RDVR/31 if cleared radar vectors departure via RWY 31)

8.2.9. IFR departing aircraft following SID will have an initial climb altitude of **7000 feet.** To reflect this altitude, the Delivery controller shall set **the temporary altitude** of IFR departing aircraft to **7000 feet** prior to issuing clearance.

8.2.10. To check the cruising altitude of the flight plan, the Delivery controller shall first identify the departure route under which the aircraft will fly within Hong Kong FIR. Generally, with the exception of aircraft departing towards PRC airspace (using Chinese RVSM metric altitudes, except for Sanya Oceanic FIR), the Delivery controller shall assign an altitude according to the ODD-EVEN rule with reference to the altitudes available within the Letters of Agreement with each neighbouring FIR. These altitudes may also be found within the Hong Kong vACC Cue Card. The ODD-EVEN rule within a RVSM airspace, simply put, assigns altitude of flight according to the magnetic track of the aircraft.

8.2.11. Assignment of cruising altitude for aircraft departing via BEKOL shall base upon the metric RVSM system in China. Controllers may refer to the VATPRC division website for the Chinese RVSM Flight Level Allocation Scheme (vatprc.net/rvsm) or the Hong Kong vACC Cue Card.

8.2.12. IFR departing aircraft with destination Shenzhen Baoan Int'l Airport (ZGSZ) via BEKOL have a cruising altitude of S0180 (5900ft), lower than the initial climb altitude of 7000ft. The Delivery controller shall coordinate with the controller responsible for Hong Kong Departure for a different initial climb altitude. In the absence of a controller responsible for Hong Kong Departure, then the initial climb altitude shall be 5000ft.

8.2.13. The Delivery controller shall check if the voice flag is set in the remarks section and add or correct it if required:

- /v for voice
- /r for receive-voice
- /t for text-only

8.2.14. **Clearance Delivery does not issue clearance to VFR aircraft.** VFR departing aircraft can contact Ground Movements Control directly for taxi clearance.

8.2.15. In the real world, an IFR flight plan contains a variety of information. However, some of this information may not necessarily pertain to the work of virtual ATC on VATSIM. For EuroScope users, certain fields in the flight plan window are considered optional for the purposes of issuing IFR clearance. These fields are highlighted in yellow in Figure 8.1.

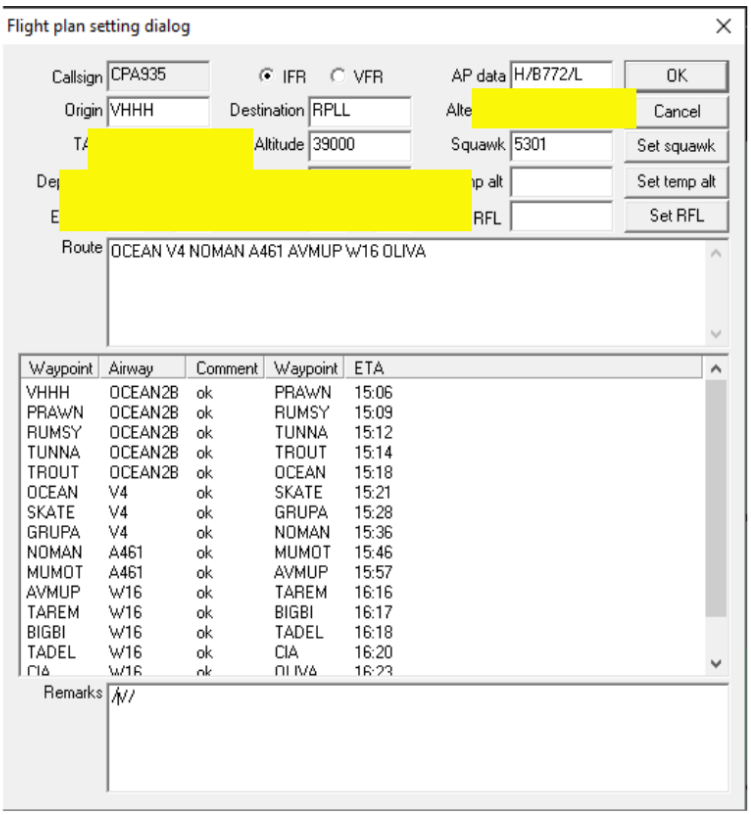

Figure 8.1: A sample EuroScope flight plan window. The fields highlighted in yellow are considered optional for issuing clearance.

8.2.16. Controllers may refer to SOP001-ANNEX-1 for detailed examples on flight plan inspection.

8.2.17. Controllers shall refer to the Hong Kong vACC Cue Card for a list of available SIDs. Should the automatic squawk code assignment function provided by the TopSky plugin fail, then controllers may also refer to the Cue Card for a list of available squawks.

8.3. SIDS FOR KAI TAK AIRPORT

8.3.1. The SIDs shown on the Hong Kong vACC Cue Card are based on historical charts which do not consider the traffic flow of the new Hong Kong Int'l Airport (VHHH). These SIDs lead to the boundary of Hong Kong FIR and are not followed by transition routes. Therefore, it is not necessary to include a transition route in the flight plan.

8.4. IFR CLEARANCE FORMAT

8.4.1. The format of the IFR clearance issued by VHHX_DEL shall follow the rules set forth by ICAO Doc 4444 Section 6.3.2.3.

8.4.2. As the initial climb for all SIDs at VHHX is included as part of the SID (consistently 7000 feet), it is not necessary to include the initial climb or the departure runway in the clearance if the aircraft is cleared via a SID (see ICAO Doc 4444 6.3.2.3.d). However, the coordinated initial climb altitude (refer to Section 8.2.12) shall be included in the clearance if the aircraft has destination ZGSZ and is flying via BEKOL.

8.4.3. When radar vectors departure is used, the Delivery controller shall specify "**radar vectors departure**", **the departure runway** and the assigned **initial climb altitude** (usually 7000 feet, check with Hong Kong Departure) in the IFR clearance. The Air Movements Control controller shall also be notified of these after departure instructions so that they may issue it in the takeoff clearance.

8.4.4. It is mandatory that the Delivery controller ensures that pilots have received the latest **ATIS.** If pilots do not mention the latest or a wrong ATIS letter, the Delivery controller shall ask pilots to (re-)check the ATIS. If ATIS is not available, the Delivery controller shall state the latest QNH instead.

8.5. PHRASEOLOGY

Phraseology:
G: (Callsign), **CLEARED TO ____ VIA ____**. (After Departure Instructions) **SQUAWK ____**. **DEPARTURE INFORMATION / QNH ____**.

Example 1: CATHAY 401, CLEARED TO TAIPEI TAOYUAN VIA ENVAR1A DEPARTURE, SQUAWK 3501. INFORMATION A CURRENT.

Example 2: CATHAY 401, CLEARED TO TAIPEI TAOYUAN VIA RADAR VECTORS DEPARTURE. RUNWAY 13, INITIAL CLIMB TO 7000 FEET, SQUAWK 3501. INFORMATION A CURRENT.

8.6. RADAR TRACKING

8.6.1. VHHX_DEL shall not use radar tracking (F3 and F4 on the keyboard) at all times.

9. GROUND MOVEMENTS CONTROL

9.1. AREA OF RESPONSIBILITY

9.1.1. Ground Movements Control (VHHX_GND) owns all ground movement areas of the airport, including all taxiways and inactive or closed runways. Ground Control does not own any active runway and may not taxi aircraft across an active runway without prior approval from the controller responsible for the Air Movements Control position.

9.2. SPECIAL INSTRUCTIONS

9.2.1. Ground controllers shall ensure that the current weather conditions meet **Visual Meteorological Conditions (VMC)** before issuing taxi clearance for VFR aircraft.

- Ground visibility more than 5000 meters
- Ceiling (BKN and OVC clouds) not lower than 1500 feet AGL

9.2.2. The Ground controller shall issue taxi clearance to the appropriate runway-in-use as determined by Air Movements Control and announced on ATIS. If Air Movements Control is not available, the controller responsible for the Air Movements Control position shall determine the departure runway-in-use based on local weather conditions. If Air Movements Control ATC service is not available, the ground controller shall determine the runway-in-use following the method described in Section 6.1.

9.2.3. Ground controllers shall provide the current QNH to the pilot when issuing taxi clearance to the runway, unless it has been confirmed that the pilot has received the latest ATIS information. If the ATIS information has changed between the time the aircraft received its departure clearance and the time the aircraft is issued push back clearance, the ground controller shall advise the pilot that new ATIS information is available.

9.2.4. For arrival traffic, **the ground controller shall ask the pilot if a specific parking or gate is requested.** If the pilot has no parking or gate preference, the ground controller shall assign a gate or parking based on the nature of the flight. (e.g. passenger aircraft should go to the gate, cargo aircraft should go to the cargo terminal). Alternatively, controllers may assign the parking stand generated by the Ground Radar Plugin.

9.2.5. Holding points other than the ones at the furthest end of the runway (i.e. holding points between A2 - A12) require coordination with Air Movements Control.

9.2.6. There are two helipads east of Stand 81. These are normally used by GFS helicopters, but for VATSIM purposes they may also be used by other helicopters. Helicopters may be directly handed off to Air Movements Control for VFR clearance.

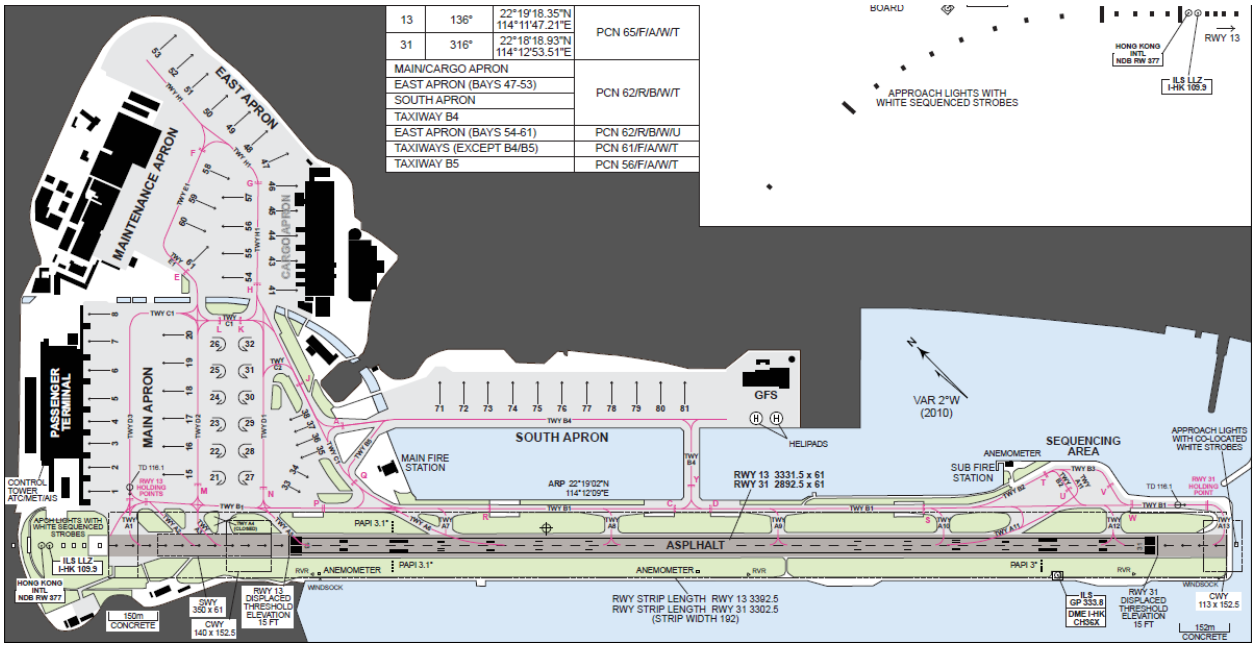

Figure 9.1: Kai Tak Int'l Airport Aerodrome Layout

9.3. PUSH BACK AND START UP

9.3.1. Prior to issuing push back and start up clearance, ground controllers should ensure that no other aircraft is in the immediate vicinity of that aircraft, and that such aircraft may not

interfere with other aircraft taxiing on the taxiway after pushing back. Ground controllers shall also ensure that the aircraft is squawking the correct transponder code with Mode C before issuing push back clearance. **When a high volume of traffic is present at the aerodrome or within the airspace, it might be necessary for the ground controller to hold push back and start up activities for a specific amount of time to avoid over-crowding the manoeuvring area, subject to coordination with other controllers on duty.** If holding is required, the ground controller shall use the following phraseology to instruct the aircraft to hold at the gate or parking.
(Reference Document: ICAO Doc 9432 4th Edition, Section 4.3)

9.3.2. Controllers shall note that pushback at stands 15 – 20 is at the discretion of the pilot as these stands are also taxi-out stands facing TWY D3. Stands 21 – 32 are strictly taxi-out stands. All other stands require pushback.

9.3.3. The following phraseology shall be used for push back and start up clearance. When Runway 13 is in use, aircraft usually push to face the runway, so there is no need to mention the pushback direction as it is mutually understood by both the pilot and the controller to face the runway. If the controller requires the aircraft to face northeast for a specific reason (e.g. runway 31 departure), then this should be mentioned in the pushback clearance.

Phraseology:
(if facing southwest)
G: (Callsign), **PUSH AND START APPROVED.**

Example 1: CATHAY 401, PUSH AND START APPROVED.

(if facing northeast)
G: (Callsign), **PUSH AND START APPROVED, FACE NORTHEAST.**

Example 2: CATHAY 401, PUSH AND START APPROVED, FACE NORTHEAST.

9.3.5. Ground Movements Control shall issue a VFR squawk code and the current QNH to fixed wing VFR departures along with the startup clearance. In the absence of Air Movements Control, helicopter VFR departures shall also be issued with a VFR squawk code and the current QNH.

9.4. TAXI CLEARANCE

(Reference Document: ICAO Doc 9432 4th Edition, Section 4.4)

9.4.1. When issuing taxi clearance to aircraft, the ground controller shall consider any potential conflict that may occur. When needed, the controller shall instruct the aircraft to hold short of certain taxiway(s).

9.4.2. When needed, aircraft may be instructed to follow other aircraft and/or give way to other

Phraseology:
G: (Callsign), **TAXI VIA** (Taxiway sequence) **TO** (Destination). (Additional Information)

Example 1: CATHAY 101, TAXI VIA DELTA THREE TO HOLDING POINT ALPHA ONE RUNWAY ONE THREE. *QNH ONE-ZERO-ZERO-SEVEN* (*only add QNH if it changes or ATIS has not been set up yet)

G: (Callsign) **BEHIND** (Aircraft Type) (Direction) **TAXI VIA** (Taxiway Sequence) **TO** (Destination), **BEHIND**.

Example: SPEEDBIRD 32, BEHIND CATHAY PACIFIC AIRBUS A330 PASSING LEFT TO RIGHT, TAXI VIA DELTA TWO AND BRAVO ONE TO HOLDING POINT ALPHA ONE RUNWAY ONE THREE, BEHIND.

G: (Callsign) **GIVE WAY TO** (Aircraft Type) (Direction) **TAXI VIA** (Taxiway Sequence) **TO** (Destination).

Example: CATHAY 749, GIVE WAY TO COMPANY BOEING 747 ON YOUR RIGHT, TAXI VIA BRAVO ONE, DELTA TWO, TO STAND ONE SEVEN.

G: (Callsign) **HOLD SHORT** (Taxiway/Runway).

Example: CARGOLUX 7432, HOLD SHORT RUNWAY ONE THREE.

9.5. HANDOFF TO TOWER

9.5.1. Ground controller may handoff aircraft taxiing to active runways for departure as they approach the designated holding point. It is not necessary for the ground controller to wait until the aircraft has reached the designated holding point to perform the handoff. During high volume of departure traffic, ground controllers shall coordinate with tower controllers for a specific handoff point to improve the flow of traffic. This also allows VFR/SVFR departure traffic to receive VFR clearance from Air Movements Control and be instructed to hold at a holding point in high traffic volume.

Phraseology:
GND: (Callsign), **CONTACT TOWER ON** (Frequency).

9.6. FROM THE RUNWAY

9.6.1. Once an aircraft has landed, or if a departure aircraft has aborted takeoff, the Tower controller shall instruct such aircraft to:
(a). Taxi onto the nearest taxiway parallel to the runway-in-use
(b). Contact the Ground controller

9.6.2. Once such aircraft has contacted the Ground controller, the ground controller shall instruct the aircraft to taxi to the destination (e.g. gate, cargo ramp or a runway-in-use for aircraft aborted takeoff).

9.7. RADAR TRACKING

9.7.1. Ground Movements Control shall not use radar tracking (F3 and F4 functions on the keyboard) at all times.

10. AIR MOVEMENTS CONTROL

10.1. AIRSPACE

10.1.1. Air Movements Control is responsible for the Category C airspace within Kai Tak Aerodrome Traffic Zone (ATZ) (SFC to 2000 feet. Aircraft outside of the ATZ shall be controlled by Hong Kong Zone Control (VHHH_Z_TWR). Refer to chart AD 2-VHHH-CTR-1 for details.

10.1.2. Due to radar coverage environment extending up to 9000 feet, controllers online as Air Movements Control may not extend the coverage to Hong Kong Zone Control (VHHH_Z_TWR) if the Zone Control position is offline. Such coverage may be provided by an APP/DEP/CTR controller only (refer to AIP AD 2.17).

10.1.3. The boundary of the Kai Tak ATZ is a **rectangle** with its edges extending **two (2) nautical miles** from RWY 13/31. Certain parts of the Kai Tak ATZ fall into Port Shelter (PSH) UCARA. The boundary of UCARA shall prevail, and, as such, the boundary of Kai Tak ATZ on the northeast side where it overlaps with UCARA shall follow the boundary between Island Zone and UCARA instead.

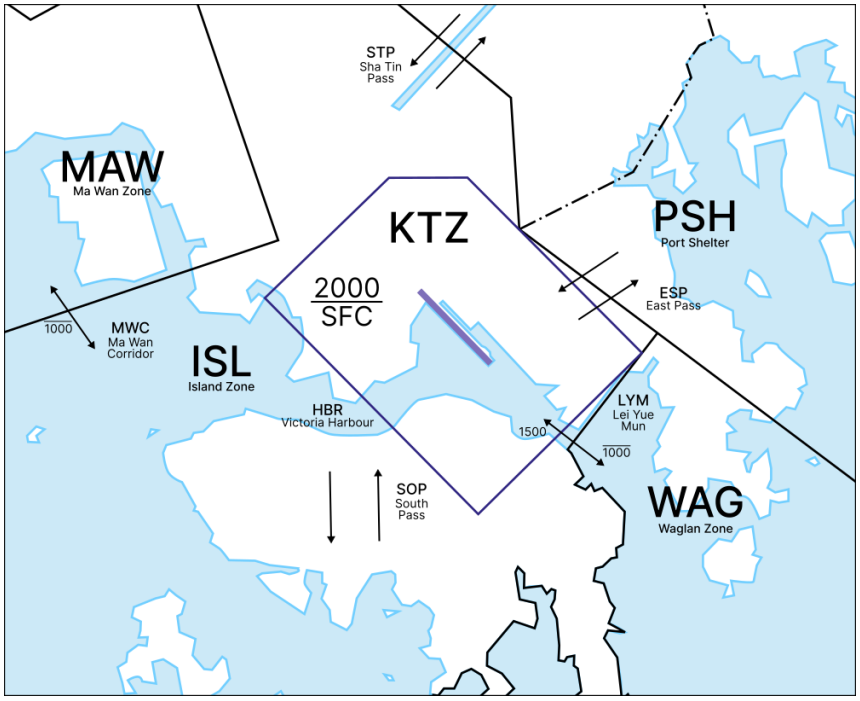

Figure 10.1: Location of Kai Tak ATZ in relation to other control zones

10.2. SPECIAL INSTRUCTIONS FOR VFR AND SVFR TRAFFIC

10.2.1. VFR and SVFR departing aircraft shall file a valid flight plan with a valid route prior to requesting taxi clearance to the active runway. A valid route shall contain all CTR zones and entry/exit routes that the aircraft will fly after departure. A detailed discussion of this

can be found in the SOP006 document. The only exception to providing a valid route is when an aircraft remains in circuit within the ATZ. For VFR traffic, Air Movements Control shall ensure that the current weather meets VFR minima prior to issuing clearance. A SSR transponder code shall be assigned with the clearance.

10.2.2. When there is a controller responsible for Hong Kong Zone Control, Air Movements Control shall coordinate with Zone Control regarding the clearance limit of a VFR / SVFR aircraft. Normally, **VFR and SVFR aircraft leaving the ATZ** are cleared to **a specific VRP / zone within Hong Kong CTR**. Controllers should note that the clearance limit shall **not** be one of the following, unless otherwise coordinated with the respective unit:

- Other controlled ATZs
- Anywhere outside the Hong Kong CTR
- UCARA
- Repeated VRPs (as filed in the flight plan)

In all four cases above, the clearance limit shall be the VRP / zone just before the aforementioned "point". In cases where the pilot requests to hold/stay at a certain VRP / zone for an extended period of time, then the clearance limit shall be that specific VRP / zone. In all cases, a new VFR clearance will need to be issued when the pilot is ready to proceed further. For VRPs that are not directly accessible via a straight-out departure, additional instructions to join the traffic circuit and the VRP at which the aircraft can expect to leave the ATZ shall be given.

The clearance shall be issued in the following format:

Phraseology:
T: (Callsign), **CLEARED TO** (Zone / VRP within CTR), **STANDARD ALTITUDE RESTRICTIONS**, (After Departure Instructions), (QNH), (Squawk).

Example:
BHLC, CLEARED TO PAK MONG, STANDARD ALTITUDE RESTRICTIONS, QNH 1013, SQUAWK 5201.

Controllers shall instruct aircraft to follow standard altitude restrictions on entry/exit routes as per AIP AD 2.19.3.1. It is not necessary to instruct aircraft to maintain VFR at or below a certain altitude once the aforementioned instruction has been given.

For example, assume an aircraft has filed a flight plan with the route:
KTZ HBR ISL GRI ELC REP WAG STL LYM KTZ

The clearance shall then be:

Phraseology:
Example:
BHLC, CLEARED TO LEI YUE MUN, STANDARD ALTITUDE RESTRICTIONS, QNH 1013, SQUAWK 5201.

10.2.3. When there is no controller responsible for Hong Kong Zone Control, the Air Movements Control controller may only clear aircraft to the boundary of the Kai Tak ATZ (e.g. Harbour, Lei Yue Mun) in the VFR clearance. The aircraft shall be instructed to monitor UNICOM 122.800 MHz upon approaching the boundary.

10.2.4. VFR/SVFR traffic in the air requesting a different route to the one in their flight plan shall be given a new VFR clearance. This clearance shall be given with respect to Section 10.2.2, 10.2.3 & 10.2.4. Controllers are reminded that routes leaving the ATZ require coordination with Hong Kong Zone Control (VHHH_Z_TWR). The Air Movements Control controller shall amend the aircraft's flight plan with the new route. Once this has been done, and the clearance correctly read back, the controller may instruct the aircraft to track to the filed VRP that leaves the ATZ.

10.2.5. Fixed wing VFR and SVFR traffic remaining within the circuit in the ATZ shall be given a clearance into the ATZ. The clearance shall be issued in the following format:

Phraseology:
T: (Callsign), (Circuit Joining Instruction), (QNH), (Squawk).

Example:
BHLC, AFTER DEPARTURE JOIN LEFT HAND CIRCUIT RUNWAY 13. QNH 1013, SQUAWK 5201.

10.2.6. Aircraft entering the ATZ from other CTR zones shall be given runways-in-use on initial contact. A clearance to perform a manoeuvre inside the ATZ / clearance limit within the ATZ implies a clearance into the ATZ (e.g. joining a leg of the circuit or clearing aircraft directly to Kai Tak). See example below:

Phraseology:
T: (Callsign), (Runways-in-use), (QNH) (Additional Instructions).

Example:
BHLC, RUNWAY 13 IN USE, QNH 1013. JOIN LEFT HAND CIRCUIT RUNWAY 13.

10.2.7. VFR pilots are self-responsible for being separated visually from all traffic. Air Movements Control shall ensure that weather minima are fulfilled and issue traffic information to VFR aircraft to aid them in maintaining separation.

10.2.8. VFR and SVFR aircraft remaining in the circuit shall fly a left-hand circuit if RWY 13 is in use or right-hand circuit if RWY 31 is in use.

10.2.9. VFR/SVFR arriving/departing **helicopter flights** tracking via Harbour (HBR) shall be instructed to cross the runway 13/31 centreline. The controller shall ensure that RWY 13 is free of traffic before issuing the crossing clearance. Controllers are also reminded that the takeoff clearance for helicopters differs slightly in that rather than being cleared for takeoff, they are cleared for liftoff.

10.2.10. Controllers shall note the use of the following phraseology for holding helicopters:

Phraseology:
T: (Callsign), **HOLD VISUALLY AT** (VRP).

Example:
BHLC, HOLD VISUALLY AT LEI YUE MUN.

10.2.11. Where necessary, fixed wing VFR aircraft transiting the ATZ shall be instructed to join the circuit and/or overfly the runway. Controllers shall avoid issuing instructions that would lead to aircraft overflying the airport terminals. Helicopters transiting the ATZ north-to-south (or vice versa) shall be "cleared to cross the runway 13 / 31 centreline". **This also applies to helicopters arriving / departing from the GFS helipad.**

10.2.12. Controllers shall note the use of the following phraseology for GFS helicopters landing at the GFS helipad:

Phraseology:
(Clearing to land)
T: (Callsign), **CLEARED GFS DISCRETION**.
Example: RESCUE 35, CLEARED GFS DISCRETION.

10.2.13. As the GFS apron is a non-movement area, clearing the helicopter for "GFS discretion" essentially means that landing is at their discretion. Whilst real world examples have shown that winds are not typically given with their landing clearance, Air Movements Control controllers are still advised to give the winds to landing GFS helicopters.

10.2.14. Controllers should also note that helicopters are "cleared to lift" rather than "cleared for takeoff".

10.3. DEPARTING TRAFFIC

10.3.1. Once an aircraft has been handed off from the Ground controller and is approaching the specified holding point, depending on the traffic situation, the Tower controller may issue one of the following instructions to the aircraft:

Instruction	Situation
Hold short of runway	When there is activity on the runway or if the aircraft would cause a conflict by entering the runway
Line up and wait	When entering the runway will not cause any conflict but the runway is not clear of preceding arrival aircraft or the separation between the aircraft in question and the preceding departure is not enough
Takeoff Clearance	When the runway is clear of activity and the spacing between the aircraft in question and the preceding aircraft is sufficient (VFR/SVFR traffic: VFR/SVFR clearance precedes the takeoff clearance)

10.3.2. For IFR departing aircraft requiring **radar vectors**, the Tower controller shall provide a **heading and the initial climb altitude along with the takeoff clearance.**

For example:
"Cathay 505, after departure fly runway heading, climb to 7000ft, surface winds 100 degrees 9 knots, runway 13, cleared for takeoff."

10.3.3. Air Movements Control shall ensure that they have obtained a release from the controller controlling the airspace which aircraft will enter after departure prior to issuing takeoff clearance for IFR departures to avoid conflicts with departures at Chek Lap Kok airport.

10.3.4. IFR departing aircraft on different SIDs shall be sequenced alternatively where possible. For example, assume that there are 3 departing aircraft. Two of them are flying the ENVAR1A departure, whilst the third aircraft is flying the EPDOS1A departure. The first aircraft to depart would then be one of the aircraft on the ENVAR1A departure, followed by the aircraft on the EPDOS1A departure, and finally the other aircraft on the ENVAR1A departure.

10.3.5. IFR departing aircraft shall be separated with respect to the following Distance-based Wake Turbulence Separation Minima:

Distance-based Wake Turbulence Separation Minima					
		Follower			
		SUPER	HEAVY	MEDIUM	LIGHT
Leader	SUPER	-	**5 NM**	**7 NM**	**8 NM**
	HEAVY	-	**4 NM**	**5 NM**	**6 NM**
	MEDIUM	-	-	-	**5 NM**
- Indicates Wake Turbulence Separation is not applicable					

Figure 10.4: Distance-based Wake Turbulence Separation Minima Table

10.3.6. In cases where wake turbulence separation is not applicable (e.g. aircraft of wake turbulence category SUPER following an aircraft of wake turbulence category HEAVY) then the minimum spacing between these aircraft shall be 4 NM / 90 seconds.

10.3.7. If the departing aircraft has to abort takeoff, the Tower controller shall use the following phraseology and instruct the aircraft twice. After the instruction, the Tower controller shall confirm that the aircraft has acknowledged the cancel takeoff instruction. This is a common occurrence on VATSIM when an aircraft randomly connects to the network while on an active runway. Once conditions permit, if the aircraft needs to return to the end of the runway for takeoff, the Tower controller shall instruct the aircraft to hold short of the closest taxiway parallel to the active runway and hand off the aircraft to the Ground controller.

10.3.8. Once a departure aircraft is airborne, the Tower controller shall hand off the aircraft to the Departure controller.

Cancelling takeoff clearance:
Phraseology:
(Takeoff roll commenced) TWR: (Callsign) **STOP IMMEDIATELY.** (Callsign) **STOP IMMEDIATELY**. **ACKNOWLEDGE.**
(Takeoff roll not commenced) TWR: (Callsign) **HOLD POSITION, CANCEL TAKEOFF CLEARANCE. I SAY AGAIN CANCEL TAKEOFF CLEARANCE DUE** (Reason).

Example 1:
VHHX_TWR: Oasis 100, hold position, cancel takeoff clearance. I say again cancel takeoff clearance due aircraft connected online on runway.

10.4. ARRIVAL TRAFFIC

10.4.1. Once an IFR arrival aircraft is handed off from the Approach/Director controller to the Tower controller, the Tower controller may issue one of the following instructions:

Continue approach	When there is activity on the runway or if the preceding aircraft has not vacated the same runway
Landing Clearance	When the runway is clear of activity

10.4.2. Air Movements Control controllers shall not adjust the speed of IFR arrival aircraft without the prior approval of the Approach/Director controller. If speed adjustment is necessary, or if there is not enough spacing between arriving aircraft, then the Air Movements Control controller shall coordinate with the Approach/Director controller for such adjustments.

10.4.3. When a landing clearance cannot be granted, the Tower controller shall provide traffic information to such aircraft, particularly the other aircraft that is preventing the landing clearance from being issued.

10.4.4. **MISSED APPROACH**: A missed approach can be initiated by either the pilot or the controller. On VATSIM, a pilot may call for go-around at *Decision Height (DH)* or *Decision Altitude (DA)* primarily due to weather or unforeseen obstruction to the runway (Refer to Section 8.6.9 of the HKvACC Training Manual TM-GEN-001 for a detailed discussion). Only when necessary, the Tower controller may instruct the aircraft to go-around when there is unforeseen obstruction to the runway, or the runway is not clear of activity when the aircraft is at or below DH. The latter should be rare, and all controllers shall practise safe

and sound separation to prevent that from happening. **Once an aircraft has started the go-around, the controller cannot cancel the go-around clearance**.

10.4.5. Aircraft is assumed to follow the published missed approach procedure when a go-around is necessary. The Tower controller shall advise landing aircraft on missed approach to follow the published missed approach procedure if unsure. This is especially important during major events online.

Go around (requested by the pilot):
Phraseology:
Pilot: (Callsign) **GOING AROUND.**
Tower: (Callsign) **ROGER**. (instruction if applicable)

Example 1:
OHK100: Oasis 100 going around.
VHHX_TWR: Oasis 100, roger. Follow published missed approach procedure (if unsure aircraft will follow published missed approach) OR Oasis 100, roger. Fly runway heading, climb to 7000ft. (if a specific instruction is given by the APP/DEP controller)

Go around (requested by the controller):
Phraseology:
Tower: (Callsign) **GO AROUND**. (instruction, if requested by APP/DEP to deviate from published missed approach) (Reason, if communication permits)
Pilot: **GOING AROUND,** (Callsign).

Example 2:
VHHX_TWR: Oasis 100, go around. OR Oasis 100, go around. Fly runway heading. Climb to 7000ft. Aircraft entered runway without permission. (if a specific instruction is given by the APP/DEP controller)
OHK100: Going around, Oasis 100.

10.4.6. As IFR aircraft have priority over VFR/SVFR aircraft, the Tower controller shall give priority to IFR arrival aircraft when there is VFR/SVFR traffic in the ATZ or in the circuit. When necessary, the Tower controller shall instruct the VFR/SVFR traffic to extend downwind in the circuit, take up orbits or hold at one of the VRPs if the VFR/SVFR traffic is a helicopter.

Traffic Information
Phraseology:
Tower: *UNKNOWN* **TRAFFIC** (direction, distance and other information)
Tower: *UNKNOWN* **TRAFFIC** (figure) **O' CLOCK** (bearing by clock reference and distance) **MILES** (direction of flight) (information)

Tower: (traffic) (significant point)
- **SLOW / FAST MOVING**
- **CLOSING**
- **OPPOSITE / SAME DIRECTION**
- **OVERTAKING**
- **CROSSING LEFT TO RIGHT / RIGHT TO LEFT**

Tower: If known:
- (type of aircraft)
- (level) / (relative level) (figures) *NOT CONFIRMED*
- **CLIMBING / DESCENDING**

Example:
VHHX_TWR: BHLC, traffic is a Cathay Pacific Boeing 777, at your 10 o'clock, on 3 mile final RWY 13.

10.4.7. Once an aircraft has landed, the Tower controller shall instruct the aircraft to taxi onto the nearest taxiway parallel to the runway-in-use and contact the relevant Ground controller.

10.5. FLOW CONTROL PROCEDURES

10.5.1. When the aerodrome is experiencing high volumes of traffic, it may be necessary for Air Movements Control to make use of different holding points to sequence traffic. Once an aircraft has been handed off from the Ground controller, the Tower controller may assign a different holding point to the aircraft. The goal is to spread traffic evenly across all active holding points.

10.5.2. When a gate hold is necessary (e.g. when the holding points become saturated), Air Movements Control may instruct the Ground controller to hold aircraft at the gate until the holding points are no longer saturated.

10.6. RADAR TRACKING

10.6.1. Air Movements Control shall not use radar tracking (F3 and F4 functions on the keyboard) for IFR aircraft. However, the Tower controller **shall use radar tracking for VFR aircraft flying within the ATZ.**

11. DEVIATION FROM THE AIP OF HKSAR

11.1. While it is the goal of VATSIM to simulate real-world navigation environment, there are certain circumstances where strictly following real-world regulations may not fit the context or needs of the VATSIM online environment. In the interest of the VATSIM community, certain exemptions are granted to deviate from the AIP of Hong Kong or real-world operations.

11.2. VFR FLIGHTS IN UCARA

11.2.1. Pilots conducting VFR flights in Uncontrolled Airspace Reporting Areas (UCARA) are to monitor VATSIM universal UNICOM (122.800 MHz) rather than any local UNICOM frequency.

RECORD OF REVISION

DATE	REV.	REVISION CONTENT	APPROVAL
19 JUL 2015	1	Changed TWR Frequency from 118.20 to 118.70	A. TANG
14 JUN 2020	2	Updated Section 5 Updated link in Section 6.3	J. CHENG
1 DEC 2021	3	Changed Section 10.2.5	J .CHENG
30 MAR 2023	4	Updated Frequencies (Section 5) Updated Squawk Code Range (Appendix B)	J. WAI
01 MAR 2024	5	Removed Appendix A & B Added Sections 5.2, 9.3 – 9.6, 10.3 & 10.4 (ATIS Broadcast Policy, Push and Start, Taxi Clearance, Handoff to Tower, Departing and Arriving Traffic) for consistency with other Aerodrome SOPs Updated Section 10.2 (ATZ VFR Procedures) Added Section 10.3.4 (Alternating Departures) Added Section 10.3.5 (Wake Turbulence Separation) Added Section 9.2.5 (Guidance on Secondary Holding Points) Added Sections 9.2.6 and 10.2.8 (Guidance on GFS Helipad) Updated Section 8.2 (Flight Plan Inspection Procedures) Updated Section 8.4 (IFR Clearance Format) Added Section 8.2.12 & 8.4.3 (Initial Climb for Departures to Shenzhen) Updated Section 8.5 (IFR Clearance Phraseology) Added Section 10.5 (Flow Control Procedures) Updated Section 10.6 (Radar Tracking)	T. SIU
05 OCT 2024	6	Updated Pushback Phraseology Added section requiring departure releases for all departing IFR aircraft	T. SIU
07 DEC 2024	7	Updated VFR Procedures	T. SIU